A computer-implemented method for scheduling cells output on an output path of a data switch, said data switch being configured for switching said cells from a plurality of input paths to said output path, comprising:

providing a plurality of queues, each queue of said plurality of queues having an assigned weight, respective ones of said plurality of input paths being coupled to respective ones of said plurality of queues;

providing a plurality of queues of queues, said plurality of queues being coupled to said plurality of queues of queues with queues of said plurality of queues having a similar weight being coupled a same queue of queues of said plurality of queues of queues; and

providing a scheduler, said plurality of queues of queues being input into said scheduler, said scheduler being coupled to said output path.

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- The method of claim 1 wherein said plurality of input paths represent virtual connections.
- The method of claim 1 wherein said plurality of input paths
 represent input ports.
 - 4. The method of claim 1 wherein each of said plurality of queues of queues has a queue of queue weight that is equal to a queue weight of queues coupled to said each of said plurality of queues of queues.

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- The method of claim 1 wherein each of said queues of queues receives cells from queues coupled to said each of said queues of queues in a round robin manner.
- 5 6. The method of claim 1 wherein said scheduler receives cells from queues of queues coupled to said scheduler in a round robin manner.